

AMENDMENTS TO THE CLAIMS

1-24. (Canceled)

25. (Currently amended) A cleaning device for cleaning an edge portion of a board, the cleaning device comprising:

a board having an edge portion;

a brush that contacts having bristles that are at least partly surrounded by walls forming a cleaning case, the bristles being dimensioned to extend from a brush support portion so as to contact just the edge portion of said board when the edge portion of the board is positioned for cleaning so that the bristles remove and removes dust attached to the edge portion of the board;

an ion injection device receiving a compressed gas and positioned to provide for directing an ionized compressed gas flow directed toward the bristles of the brush when the bristles are in contact with the edge portion of the board to remove the dust attached to the edge portion of the board; and

a discharge device for absorbing and removing opening in a wall of the cleaning case that receives dust removed by the bristles from the edge portion of the board the ionized gas directed toward said brush from the ion injection device.

26. (Currently amended) The cleaning device according to claim 25, wherein said discharge device opening is provided with a discharge pipe portion leading away from the discharge opening for discharging the ionized gas and dust away from the cleaning case.

27. (Currently amended) The cleaning device according to claim 26, further comprising a source of compressed air having a nozzle member structured to emit compressed air so that the compressed air flows along a bottom portion of the cleaning case forming a receiving member extending directed toward the discharge device opening so that dust collected on the receiving member is blown by the compressed air toward the discharge opening.

28. (Currently amended) The cleaning device according to claim ~~[[26]]~~25, ~~comprising a wherein the cleaning case having an opening portion has a gap having dimensions sized to permit entry of the edge portion of for said board through the gap into the cleaning case to engage with the bristles of the brush wherein said discharge device is provided with a receiving member which is provided in opposition to said opening portion at the undersurface side of said cleaning case.~~

29. (Currently amended) The cleaning device ~~of the board~~ according to claim 25, ~~further comprising a brush positioning device capable of adjusting the position of said brush in a direction in and out of contact with said board support portion inside the cleaning case so that the bristles location inside the cleaning case can be adjusted.~~

30. (Currently amended) The cleaning device according to claim 25, wherein the bristles of the brush includes include conductive fibers.

31. (Currently amended) The cleaning device according to claim ~~[[25]]~~28, wherein the ~~ion injection device is positioned so that board is allowed to ingress along its edge portion, so that the edge portion of said board is cleaned by said brush, further wherein the ionized gas is positioned flows therefrom in a direction that is reverse to the ingress direction of said board toward the gap through which the edge portion of the board is inserted into the cleaning case.~~

32. (Currently amended) A cleaning device for cleaning ~~[[the]]~~ an edge portion of a board ~~in which terminals are formed~~, comprising:

a stationary brush fixed in position inside a cleaning case having a gap through which the edge portion is inserted to position the edge portion inside the cleaning case;

a drive mechanism structured to linearly drive the cleaning case with the fixed position brush in a direction parallel to a direction that the edge portion extends so that the linear movement of the cleaning case moves the fixed brush along the inserted edge portion of said board for brushing the edge portion of said board and- to remove removing the dust attached to the edge portion of the board.

33. (Withdrawn) A method of cleaning an electronic device, comprising the steps of:

- providing a board having an edge portion;
- brushing the edge portion of said board and removing dust attached to the edge portion;
- injecting an ionized gas toward the brush; and
- absorbing and removing the gas injected toward said brush.

34. (Withdrawn) The cleaning method according to claim 33, further comprising the step of directing an non-ionized gas towards the brush.

35. (Currently amended) A cleaning ~~device~~ apparatus for cleaning an edge portion of a device in which terminals are formed, the cleaning apparatus comprising:

- ~~a board including an edge portion;~~
- a brush having brush hair that includes conductive fiber, the brush being supported so that the brush hair for brushing a portion that includes conductive fiber is at least partially surrounded by walls forming a cleaning case with the brush hair that includes conductive fiber extending to a cleaning position where said edge portion of the board-device will be contacted by the brush hair that includes conductive fiber for and removing dust attached to the edge portion of the device; and
- an ion injection device receiving a compressed gas and positioned to provide an ionized flow of the compressed gas toward the brush hair that includes conductive fiber when the brush hair that includes conductive fiber contacts the edge portion of the device at the cleaning position; and
- a discharge device for discharging opening in a wall of the cleaning case that receives the dust removed by said brush hair that includes conductive fiber to then discharge the dust away from the brush hair that includes conductive fiber.

36. (Currently amended) The cleaning ~~device~~ apparatus according to claim 35, further comprising a brush positioning device capable of adjusting structure configured to adjust the position of said brush so that the brush hair that includes conductive fiber is moved in a direction in and out of toward and away from contact with said board-edge portion of the device at the cleaning position.

37. (Currently amended) The cleaning device ~~apparatus~~ according to claim 35, wherein the brush includes hair, further where the hair is positioned around a roller.

38. (Currently amended) The cleaning ~~apparatus~~ device according to claim 35, further including a nozzle member having an oblong injection orifice oriented to provide an air flow from the oblong injection orifice along a surface of toward the edge portion of the board device at the cleaning position.

39. (Canceled).

40. (Withdrawn) A mounting apparatus for mounting electronic parts comprising:
a part conveying device in which a plurality of part holding portions are integrally provided along a peripheral direction at a predetermined interval, wherein the plurality of part holding portions are intermittently driven in a peripheral direction;

a part supply portion for supplying an electronic part to each part holding portion of said part conveying device intermittently driven; and

an inspection device for inspecting whether or not dust is attached to the electronic parts supplied and held by said part holding portion at a position where said part holding portion stops by the intermittent driving of said part conveying device.

41. (Withdrawn) The mounting apparatus according to claim 40, further comprising a control device for collecting data from the inspection device and making a determination which parts meet a predetermined quality standard.

42. (Withdrawn) Mounting equipment for mounting electronic parts on an edge portion of a board in which terminals are formed, comprising:

a part conveying device in which a plurality of part holding portions are integrally provided along a peripheral direction at predetermined intervals and these part holding portions are intermittently driven in a peripheral direction;

a part supplying portion for supplying said electronic parts successively to each part holding portion of said part conveying device intermittently driven;

a brush having brush hair that includes conductive fiber, the brush for removing dust attached to the electronic parts by the brush hair brushing connection regions with

said terminals of said electronic parts at a stage prior to mounting said electronic parts supplied and held by said part holding portion on the edge portion of said board; and
a discharge device for discharging the dust removed by said brush.

43. (Withdrawn) Mounting equipment of mounting electronic parts on an edge portion of a board in which terminals are formed, comprising:

a part conveying device in which a plurality of part holding portions are integrally provided along a peripheral direction at predetermined intervals and these part holding portions are intermittently driven in the peripheral direction;

a part supplying portion for supplying said electronic parts successively to each part holding portion of said part conveying device intermittently driven;

a brush capable of removing the dust attached to the electronic parts by brushing the connection regions with said terminals of said electronic parts at a stage prior to mounting said electronic parts supplied and held by said part holding portion on the edge portion of said board;

an ion injection device for injecting an ionized gas toward the portion to contact at least the connection regions of said electronic parts of the brush; and
a discharge device for discharging the gas injected from the ion injection means toward said brush.

44. (Withdrawn) The mounting equipment of the electronic parts according to claim 43, comprising a brush positioning device capable of adjusting the position of said brush in a direction in and out of contact with said electronic parts.

45. (Withdrawn) The mounting equipment of the electronic parts according to claim 44, wherein a brush position detecting device capable of detecting the top end position of the brush hair is detachably attachably provided, and wherein the brush position detecting device comprises a pressure sensor capable of detecting the abutting of the top end of the brush hair against the sensor.

46. (Canceled).

47. (New) The cleaning device according to claim 32, wherein the drive mechanism includes a diving screw shaft.

48. (New) The cleaning device according to claim 47, wherein the cleaning case includes a female screw unit interfaced with the diving screw shaft.